

Appln. No.: 10/562,194
Reply to Office action of November 17, 2006

REMARKS

Claims 1-12 and 20 are canceled. Claims 12-19, 21 and 22 remain in this application.

CLAIM OBJECTIONS

In response to the Examiner's objection to the use of the term "portion", though believed to have clear meaning and support, as described in the detailed description and shown in the drawings, Applicants have replaced this term with the Examiner's suggested term "layer". Although the term "layer" has ample support in the detailed description and drawings, Applicants have elected to expressly add the term therein to provide literal support. Thus, no new matter has been added. The amendment to the term does not change the scope what is claimed, it is only made to comply with the Examiner's stated requirement.

CLAIM REJECTIONS UNDER 35 USC § 112

Applicants have amended claim 15 to more clearly recite the claimed structure by further clarifying the respective areas of the recessed region and the area presented by the opening. As amended, claim 15 is believed to be definite and in proper form for examination. Accordingly, Applicants respectfully believe this rejection should be withdrawn.

CLAIM REJECTIONS UNDER 35 USC § 102(b)

Applicants traverse the Examiner's rejection of claims 12-15, 17, 18 and 21 as being anticipated by Weiss et al (U.S. Pat. No. 5,727,791, referred to hereafter as "Weiss"), and has amended claim 12 to further recite patentable subject matter over Weiss.

As amended, claim 1 provides a cylinder head gasket including, among other things, a distance layer having at least one recessed region extending less than completely

therethrough to a seal engaging bottom surface with a boundary region extending upwardly from the bottom surface and completely surrounding the bottom surface. The recessed region receives a portion of the seal element in engagement with the seal engaging bottom surface, wherein the portion of the seal element is spaced from at least a portion of the boundary region to provide a void space between the seal element and the boundary region.

In contrast, the gasket provided in Weiss has a cover layer 5, which the Examiner is designating as a distance layer, with a raised portion projecting above the upper plane of the gasket, which in turn provides a concave portion, which the Examiner is designating as a recessed region. However, the recessed region in Weiss is completely filled with a plastic and paste-like sealing mass. Upon the raised bead being compressed, pressure is exerted on the plastic sealant mass housed in a reservoir 3 and a defined quantity of the plastic sealing mass is pressed through an opening 2 into a seal gap and fills it (Col. 4, lines 6-24). Accordingly, Weiss does not disclose nor does it lend itself to providing a recessed region as claimed by Applicant, having a boundary region completely surrounding a seal engaging bottom surface. Nor does Weiss provide a seal element engaging a seal engaging bottom surface and being spaced from a boundary region to provide a void space between the seal element and a boundary of the recessed region. To arrive at any other conclusion would require undue modification to Weiss to the point that the teachings of Weiss would be destroyed.

Accordingly, Applicants believe amended claim 1 defines patentable subject matter and to be in proper form for allowance. Such action is respectfully requested.

Claims 13-15, 17, 18 and 21 are ultimately dependant upon amended claim 1, and thus are believed to define patent subject matter for at least the same reasons.

Similarly, Applicants traverse the Examiner's rejection of claims 12-18 as being anticipated by Combet et al (U.S. Pat. No. 6,371,489, referred to hereafter as "Combet").

As with Weiss, Combet does not lend itself to providing a recessed region as claimed by Applicant, having a boundary region completely surrounding a seal engaging bottom surface. The Examiner has elected to refer to slot 10 in element 3 as being the recessed region extending less than completely through the distance layer 3. Applicants are confused as to how a slot can serve as a recess region extending less than completely through the distance layer 3? Regardless, nor does Combet provide a seal element

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engaging a seal engaging bottom surface and being spaced from a boundary region to provide a void space between the seal element and a boundary of the recessed region. All the figure show the sealing elastomer bead 13, which is molded inside the slots 10 (Col. 2, lines 65-67) as being completely filled between the open slots, and being molded over the bridges 12 (Col. 3, lines 1-4). As such, there is no teaching or suggestion to arrive at Applicants claimed seal-recessed region construction. To arrive at any other conclusion would require undue modification to Combet to the point that the teachings of Combet would be destroyed.

Accordingly, Applicants believe amended claim 1 defines patentable subject matter and to be in proper form for allowance. Such action is respectfully requested.

Claims 13-18 are ultimately dependant upon amended claim 1, and thus are believed to define patent subject matter for at least the same reasons.

CLAIM REJECTIONS UNDER 35 USC § 103

Applicants traverse the Examiner's rejection of claim 19 as being unpatentable over Weiss in view of Teranishi et al (U.S. Pub. No. 2001/0024018 A1, referred to hereafter as "Teranishi"), and has amended claim 12 to further recite patentable subject matter over Weiss.

Claim 19 is dependant upon amended claim 1, and further recites the seal element being arranged in the recessed region without contacting boundaries of the recessed region and being supported by the bottom surface of the recessed region.

As acknowledged by the Examiner, Weiss fails to explicitly disclose the seal element being arranged in its recessed region without contacting boundaries of the recessed region. So, the Examiner turns to Teranishi for help. Teranishi shows in Figure 8 a sealing member 18 disposed in a groove 17 with clearances 19 about the sealing member. However, Applicants respectfully contend, as mentioned above, that Weiss does not lend itself to incorporation of a recessed region having a boundary region completely surrounding a seal engaging bottom surface wherein a seal element engaging a seal engaging bottom surface is spaced from the boundary region to provide a void space between the seal element and a boundary of the recessed region. Weiss expressly teaches providing a plastic and paste-like sealing mass to completely fill all voids to

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which it is introduced. To incorporate as seal into Weiss to arrive at Applicants claimed structure as suggested by the Examiner would require undue modification to Weiss to the point that the teachings of Weiss would be destroyed.

Claim 22 is ultimately dependant upon amended claim 1, and thus is believed to define patent subject matter for at least the same reasons. Accordingly, Applicants respectfully request the Examiner's rejections of claim 22 over Weiss in view of Kubouchi et al, and over Combet in view of Kubouchi et al be withdrawn.

It is believed that this application now is in condition for allowance. Further and favorable action is requested.

If the Examiner believes any issues remain, Applicants' attorney respectfully requests that the Examiner initiate a phone interview to resolve the issues in order to place the Application in condition for allowance. Applicants' attorney can be reached at (248) 433-7390.

The Patent Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 04-1061.

Respectfully submitted,

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Date


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